



STATE OF MARYLAND

DHMH

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February 18, 2011

Public Health & Emergency Preparedness Bulletin: # 2011:06 **Reporting for the week ending 02/12/11 (MMWR Week #06)**

CURRENT HOMELAND SECURITY THREAT LEVELS

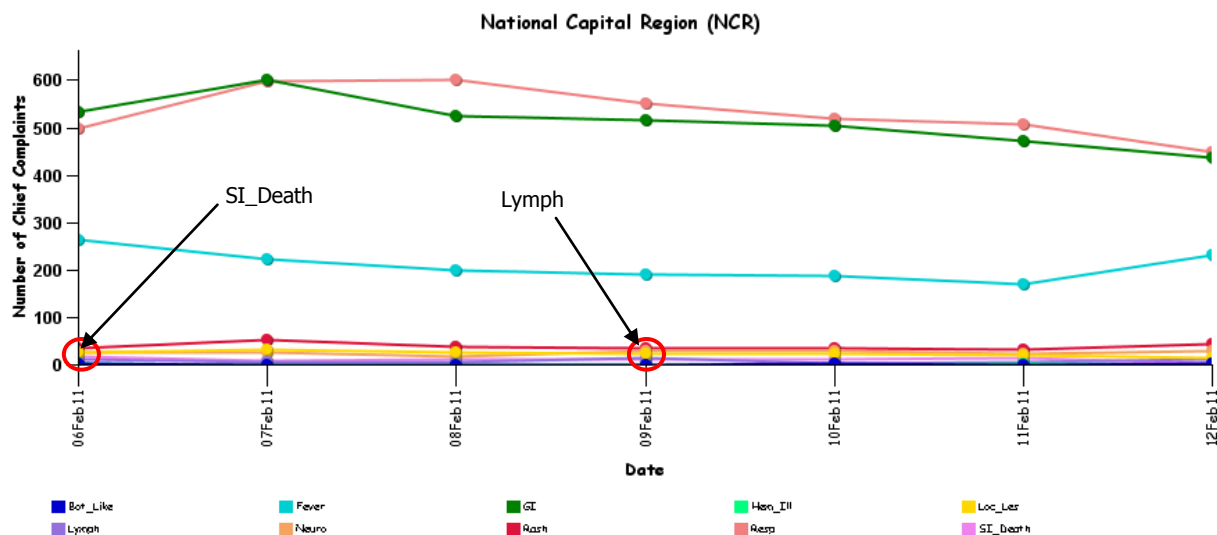
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

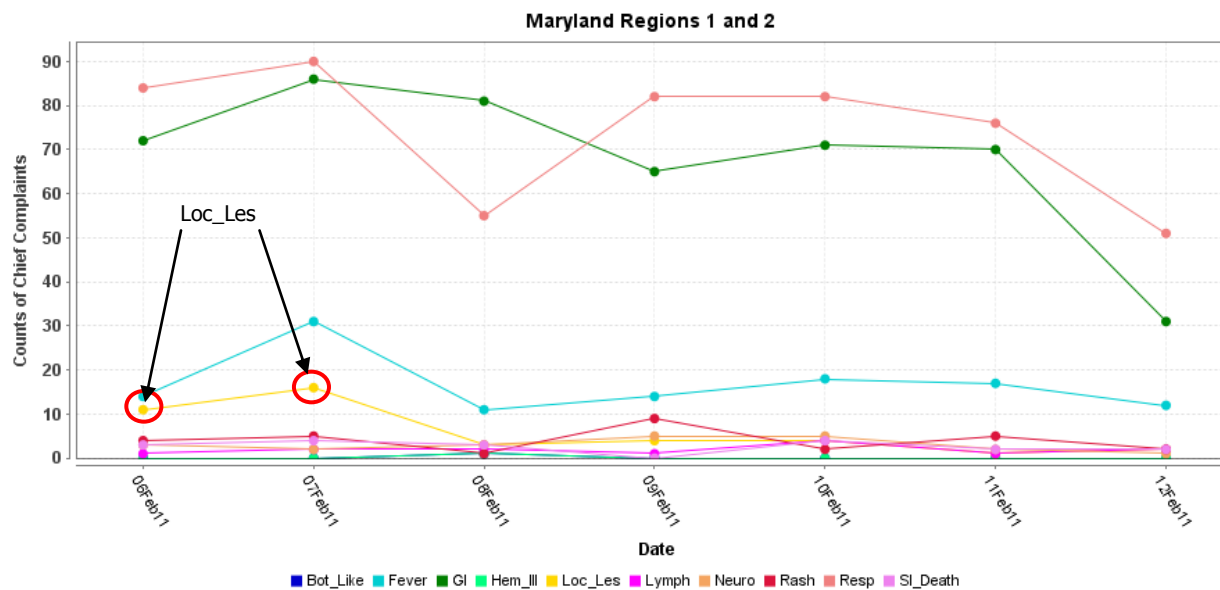
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

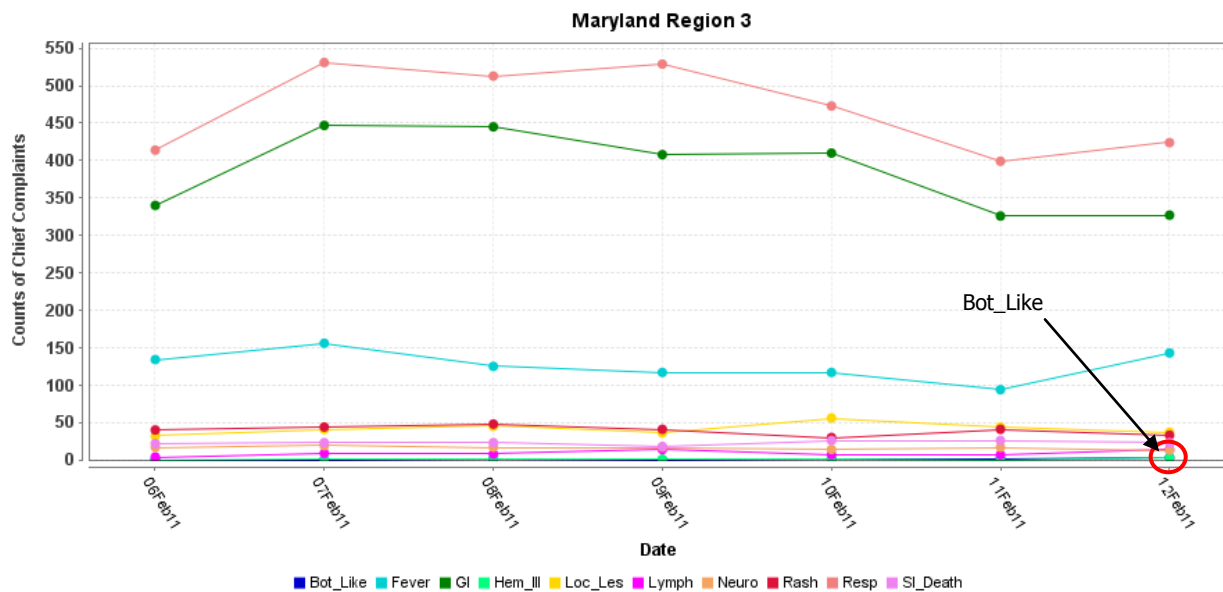


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

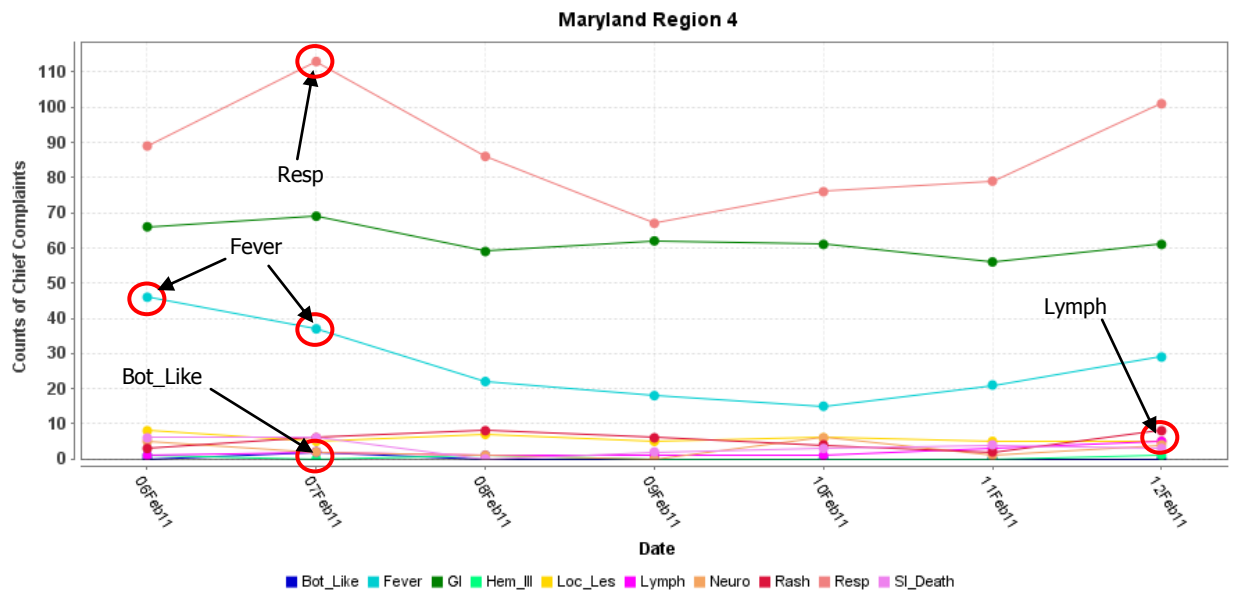
MARYLAND ESSENCE:



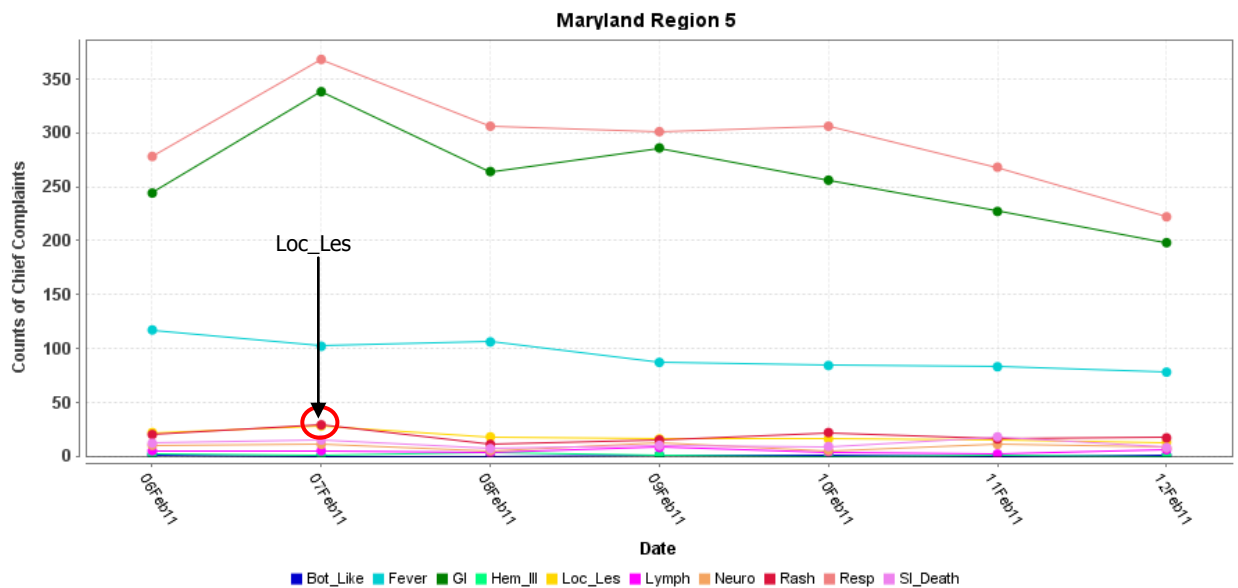
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

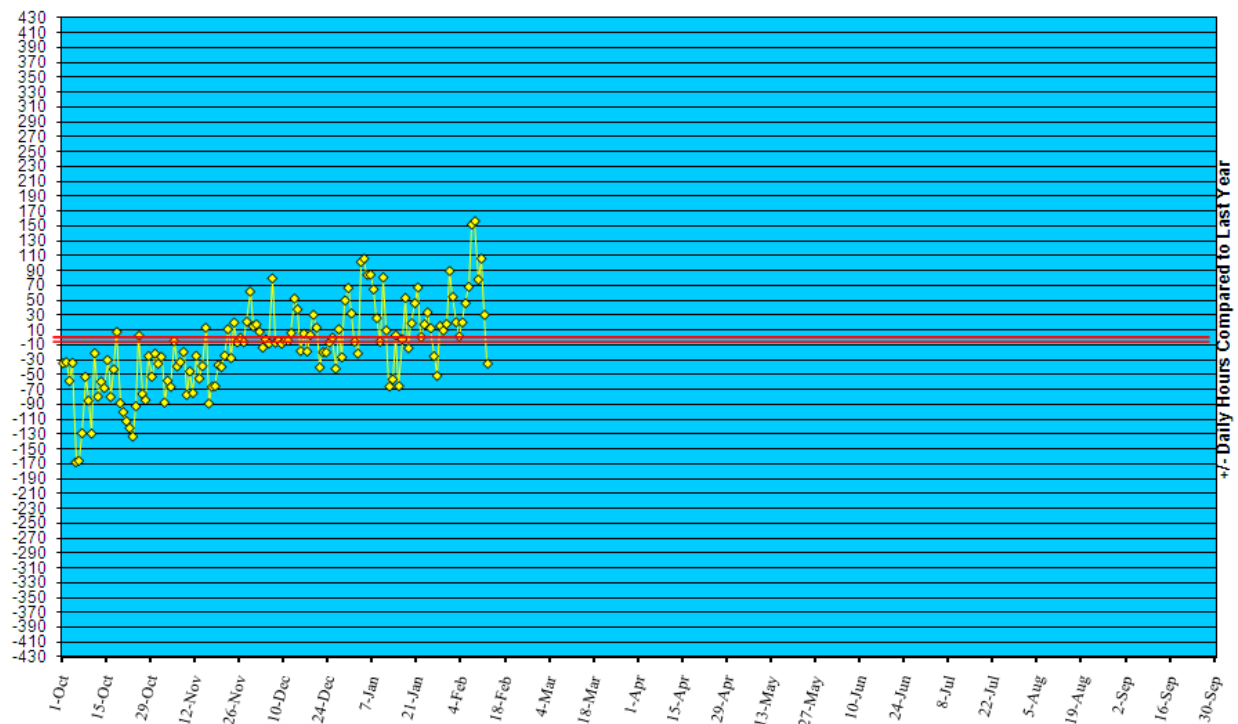


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to February 12, '11



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (February 06 – February 12, 2011):	15	0
Prior week (January 30 – February 05, 2011):	8	0
Week#6, 2010 (February 07 – February 13, 2010):	4	0

Seventeen outbreaks were reported to DHMH during MMWR Week 6 (February 06 – February 12, 2011):

5 Gastroenteritis outbreaks

2 outbreaks of GASTROENTERITIS in Nursing Homes

5 outbreaks of GASTROENTERITIS in Assisted Living Facilities

1 outbreak of GASTROENTERITIS in a Hospital

12 Respiratory illness outbreaks

4 outbreaks of INFLUENZA in Nursing Homes

1 outbreak of INFLUENZA associated with a Training Center

1 outbreak of INFLUENZA/PNEUMONIA in a Nursing Home

2 outbreaks of ILI in Schools

1 outbreak of ILI in an Institution

2 outbreaks of ILI/PNEUMONIA in Nursing Homes

1 outbreak of PNEUMONIA in a Nursing Home

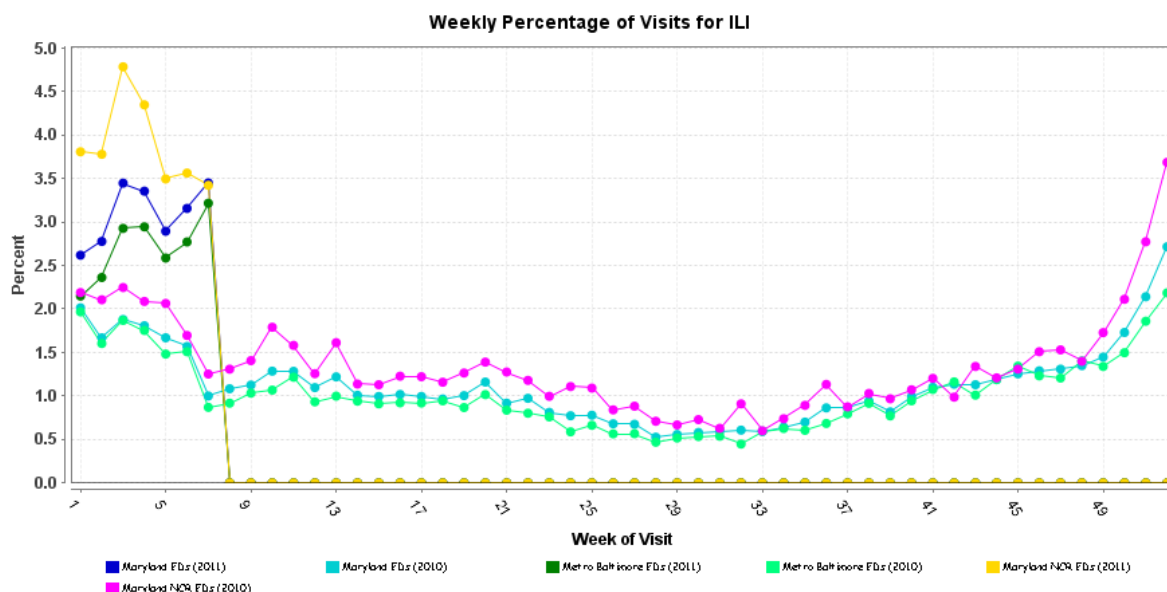
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was WIDESPREAD for Week 6.

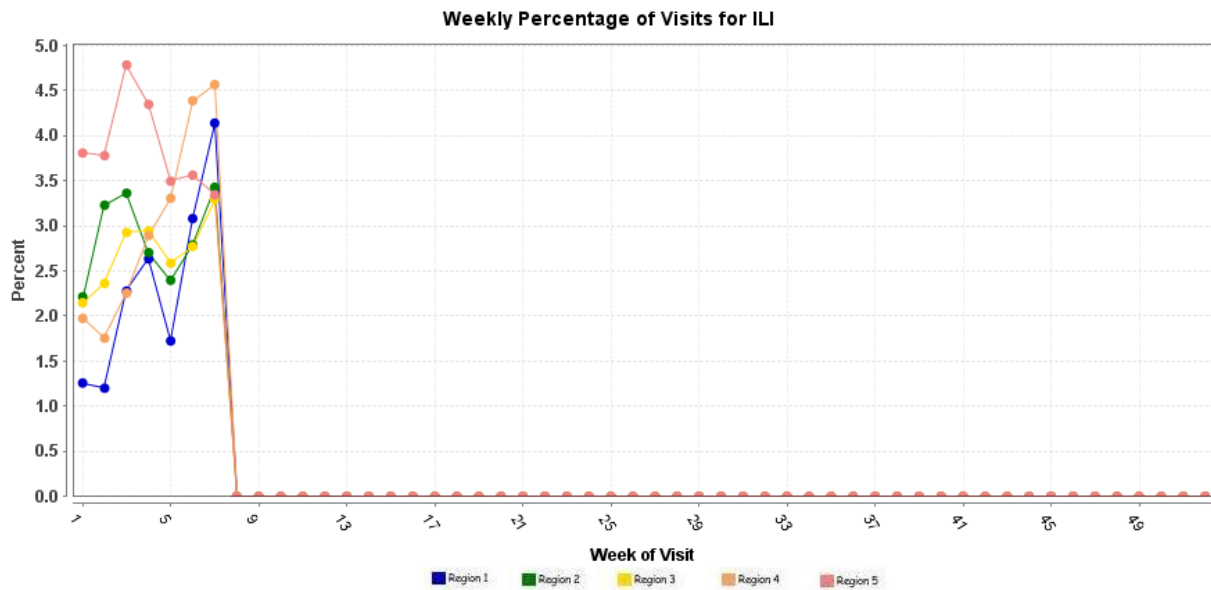
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

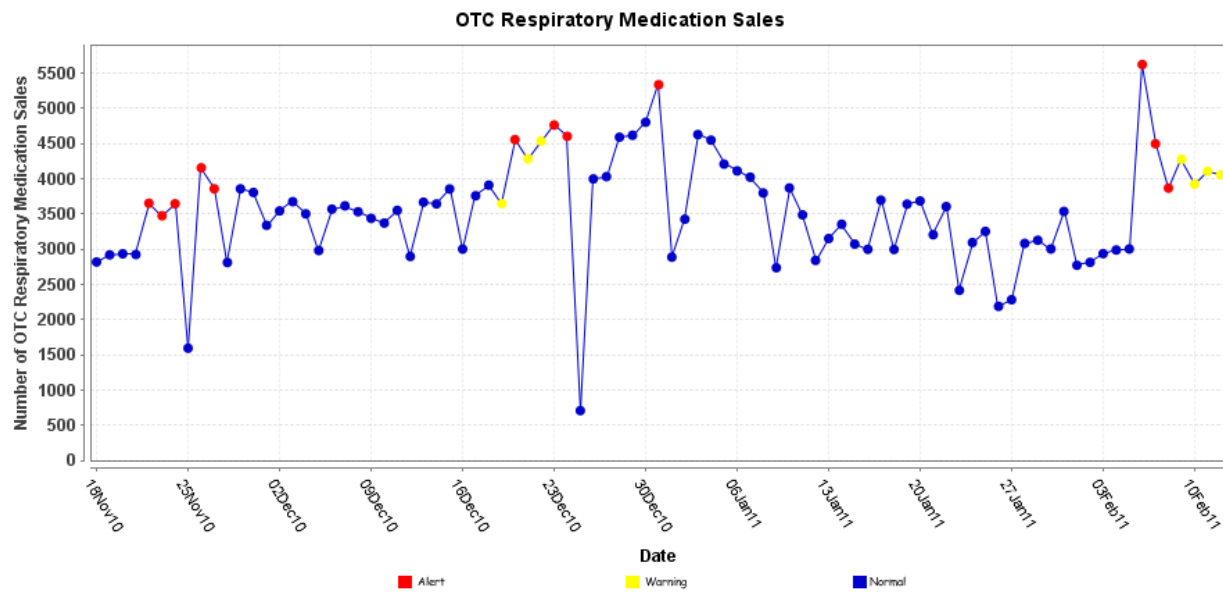


* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of February 09, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 520, of which 307 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN, FATAL (EGYPT): 10 February 2011, A new fatal case of bird flu [avian influenza A/(H5N1) virus infection] was reported yesterday [9 Feb 2011] in Monoufia [governorate]. The victim was a 43 year old agricultural worker. Dr. Hisham Atta, deputy minister of health said that the victim had been detained at hospital in Shebin 2 days ago after symptoms of the disease had begun. He had a high temperature and experienced joint pain. Clinical samples were obtained from his family to determine whether they have been exposed to the virus. The victim's house has been treated with disinfectant.

AVIAN INFLUENZA, HUMAN (CAMBODIA): 10 February 2011, On Wed 9 Feb 2011, the Ministry of Health of Cambodia announced a new confirmed case of human infection with avian influenza A (H5N1) virus. The 5 year old girl, from Prek Leap village, Sangkat Prek Leap, Khan Reussey Keo, Phnom Penh, developed symptoms on 29 Jan 2011, was admitted to a hospital on 3 Feb 2011, and died 12 hours following admission. The presence of H5N1 virus in nasopharyngeal specimens was confirmed by the Institut Pasteur, the National Influenza Centre in Cambodia. The case had been in contact with sick poultry during the 7 days before she developed symptoms. The Ministry of Health has been coordinating the response. Actions have included contact tracing, collecting specimens from suspected cases, and providing oseltamivir prophylaxis to close contacts; active surveillance and joint investigation with animal health authorities; community education; and public communications coordination with the assistance of WHO. Of the 11 cases of human H5N1 virus infection confirmed since 2005 in Cambodia, 9 have been fatal.

AVIAN INFLUENZA, H5N1, DUCK (CHINA): 09 February 2011, A spokesman for the Agriculture, Fisheries and Conservation Department (AFCD) said today (7 Feb 2011) that a duck carcass found in Tai O was confirmed to be H5N1 positive after laboratory testing. The duck carcass was found and collected at a beach near Po Chue Tam, Yeung Hau Temple, Tai O on 3 Feb 2011. It was highly decomposed when found and required a series of tests before H5N1 avian influenza was confirmed today [7 Feb 2011]. The spokesman said there were no poultry farms within 3 km [1.8 mi] of where the dead duck was found. AFCD staff have conducted inspections and found no evidence of any backyard poultry being kept there. AFCD will continue to monitor the situation and conduct inspections of the area. A ban on backyard poultry has been in force since 2006. Unauthorized keeping of 5 kinds of poultry -- chickens, ducks, geese, pigeons, or quails -- is an offense with a maximum fine of HKD 50,000 [about USD 6,400]. Repeat offenders are subject to a maximum fine of HKD 100,000 [about USD 12,800]. All relevant government departments will continue to remain highly vigilant and strictly enforce preventive measures against avian influenza. AFCD has phoned poultry farmers to remind them to strengthen precautionary and biosecurity measures against avian influenza. Letters have been issued to farmers, pet bird shop owners, license holders of pet poultry, and racing pigeons reminding them that proper precautions must be taken. The spokesman said the department would conduct frequent inspections of poultry farms and the wholesale market to ensure that proper precautions against avian influenza have been implemented. The department will continue its wild bird monitoring and surveillance. "People should avoid personal contact with wild birds and live poultry and their droppings. They should clean their hands thoroughly after coming into contact with them. The public can call the Call Centre on 1823 for follow up if they come across suspicious sick or dead birds, including the carcasses of wild birds and poultry," the spokesman said. The Food and Environmental Hygiene Department (FEHD) will continue to be vigilant over imported live poultry as well as live poultry stalls. It will also remind stall operators to maintain good hygiene. The Department of Health will keep up with its health education to remind the public to maintain strict personal and environmental hygiene to prevent avian influenza. AFCD, FEHD, the Customs and Excise Department, and the Police will strive to deter the illegal import of poultry and birds into Hong Kong to minimize the risk of avian influenza outbreaks caused by imported poultry and birds that have not gone through inspection and quarantine.

AVIAN INFLUENZA, HUMAN (EGYPT): 06 February 2011, The Ministry of Health of Egypt has announced a case of human infection with avian influenza A(H5N1) virus. A 7 year-old male from Gharbia Governorate, developed symptoms on 20 Jan 2011 and was hospitalized on 20 Jan 2011. He is in a stable condition. Investigations into the source of infection indicated that the case had exposure to sick poultry. The case was confirmed by the Egyptian Central Public Health Laboratories, a National Influenza Center of the WHO Global Influenza Surveillance Network (GISN). Of the 122 cases confirmed to date in Egypt, 40 have been fatal.

NATIONAL DISEASE REPORTS

BRUCELLOSIS, BOVINE (WYOMING): 12 February 2011, Yesterday [11 Feb 2011], the Wyoming Livestock Board announced that it had received notice from animal health officials in Montana that a Wyoming cow at a Montana auction had serological evidence of brucellosis. The adult beef cow was from a ranch in Park County. State animal health officials currently are investigating the case, and making plans for further testing of the cow, as well as the herd she was from. According to assistant state veterinarian Bob Meyer, a diagnosis of brucellosis in a Wyoming cow is no longer as big a threat to the state's cattle industry as it used to be. In the past, 2 herds diagnosed with brucellosis within 2 years meant that state would lose Class Free status and would be subjected to more stringent testing requirements. On 27 Dec 2010, the United States Department of Agriculture (USDA) published an interim rule amending the brucellosis regulations. Meyer explained that the new interim rule says that, "if you have cases of brucellosis in your state, like we do -- and if you're responding appropriately (like we are, by testing, doing epidemiology, making sure the outbreak is contained and are implementing a brucellosis management plan) -- then the USDA will no longer automatically downgrade your status." As John Clifford, chief veterinary officer for the USDA's Animal and Plant Health Inspection Service (APHIS), explained, "The brucellosis program has been very successful at reducing the disease in this country ... These new regulations will help us better address the current situation and continue to move toward our long-term goal of complete eradication." "That's good news," Meyers said. "The rest of our producers aren't threatened because of this outbreak. In fact," he said, "I'm responding to the outbreak as we speak." Meyers then returned to a meeting with herd owners. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (NEW YORK): 08 February 2011, City officials confirmed on Sat 5 Feb 2011, the 1st known cases of cholera in New York since the outbreak of the disease in Haiti in 2010. A commercial laboratory notified health officials on Fri 4 Feb 2011, that 3 New Yorkers had [cholera after] developing diarrhea and dehydration, classic symptoms of the disease, after returning from a wedding on 22 and 23 Jan 2011 in the Dominican Republic, where the government has been trying to prevent the disease from spreading from neighboring Haiti. The 3 who contracted cholera were adults who returned to the city within days of the wedding. None were hospitalized. Dr. Sharon Balter, a medical epidemiologist for the city Department of Health and Mental Hygiene, said on that the victims had all recovered. Officials declined to release the names of the patients or where they lived. Officials at the CDC have noted a few cases of cholera in the past 3 or 4 months from travelers who arrived in the USA from Haiti or the Dominican Republic. While cholera can spread swiftly where sanitation is poor and clean drinking water is unavailable, the possibility of transmitting the disease in New York is considered low. The likelihood of person-to-person transmission is also low, as one would have to drink large amounts of water contaminated with *Vibrio cholerae*, the cholera-causing bacterium, to get sick. "People get cholera by drinking water or eating food that is contaminated with cholera," said Erin Hughes, a spokeswoman for the city's health department. In New York, the occasional cholera case is not unusual. Officials see an average of one case per year, particularly among those traveling to regions where the disease is common, Dr. Balter said. But, until now, no cases have emerged since the outbreak in Haiti, she said. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

ANTHRAX, BOVINE (COLOMBIA): 10 February 2011, Outbreaks of anthrax affecting cattle have been identified by ICA and Corpoica in different parts of the country. Health care organizations are assessing the risk factors. In the case of Cordoba department, it is expected to take a week to investigate the livestock situation and determine the extent of the disease. Teresita Beltran, director of ICA, said that after determining the situation, she will schedule a meeting with the guilds and farmers to determine the collaborative financing of the response. ICA has indicated that it has some 3000 doses of vaccine on hand. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED ENCEPHALITIS (INDIA): 09 February 2011, A 22-year-old youth from Jodhpur who is suffering from viral encephalitis has been brought to a city hospital. Doctors said his condition is critical and samples of his blood have been sent to the National Institute of Virology [NIV], Pune. Doctors at the Sterling Hospital said this is the 4th case of viral encephalitis from Jodhpur, Rajasthan, in the hospital. The youth is suffering from high fever, vomiting, and head ache, and also fell unconscious. The test carried out on the cerebral spinal fluid shows inflammation in the brain due to the virus [infection]. There is a possibility of a viral outbreak in the district of Rajasthan. "We have collected his samples and have sent them to NIV to find out which virus is affecting him," said infectious diseases consultant Dr. Atul Patel. He said that ascertaining the kind of virus is important as a viral encephalitis outbreak in Bangladesh has claimed 29 lives. Earlier, there were reports of viral encephalitis fever in Chhota Udepur [Gujarat state], which claimed 2 lives. Neurophysician Dr. Sudhir Shah said he has seen 4-5 cases from the same area in the past and had also spoken to local physicians about the possibility of a viral outbreak. "A young girl with viral allergy has also been taken to a hospital and earlier too, there were cases of viral encephalitis," said Dr Shah. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (AUSTRALIA): 08 February 2011, Health authorities are testing more samples from 2 Adelaide bakeries associated with a salmonella outbreak linked to custard-filled pastries. At least 60 people have fallen ill, nearly half of them needing to be admitted to hospital. SA [South Australia] Health's investigation has linked the infections to Vili's custard-filled berliner buns and St. George Cakes and Gelati's custard-filled cannolis and eclairs. Kevin Buckett from SA Health says they expect more test results later in the week. "We have taken more samples from the manufacturing plants," he said. "We're continuing to interview the 60 or so people that were notified to us last week [week of 1 Feb 2011] and obviously the more we interview the better chance we have to get a good track on what common foods people have eaten." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

NIPAH ENCEPHALITIS (BANGLADESH): 07 February 2011, Nipah [virus] encephalitis claimed 4 more lives in Rangpur and Lalmonirhat Friday night and Saturday [5/6 Feb 2011], raising the death toll from the disease to 24. The newly deceased are aged 42, 16 and 4 years of age, resident in Dakshin Goddimari village in Hatibandha upazila of Lalmonirhat, and a resident of Mirbag in Kaunia upazila of Rangpur. The 42-year-old was 1st taken to a local clinic, Modern Clinic, but was denied admission. Then he was rushed to Rangpur Medical College (RMC) Hospital where he died at about 7:10pm. The 4-year-old died at Rangpur Medical College Hospital at 9:00pm on Fri 4 Feb 2011 and the 16-year-old died at 2:30pm on Sat 5 Feb 2011. This information was supplied to the Daily Star by RMCH director Toufiqur Rahman. The 4th victim breathed his last in his Mirbag home at about 4:30 am, said the local health officer. Meanwhile, the local administration has declared all the schools of Hatibandha upazila closed for 6 days from Saturday to control the spread of the disease. Hospital sources said 24 encephalitis-infected people are now undergoing treatment at RMCH, Gangachara Upazila Health Complex of Rangpur and Hatibandha Upazila Health Complex of Lalmonirhat at present. The condition of 2 patients admitted to RMCH is said to be critical, hospital sources said. The government has confirmed the disease as Nipah encephalitis after a laboratory test, which is so far confined to the 2 districts. The Institute of Epidemiology, Disease Control and Research (IEDCR), advised caution while drinking raw date juice as bats, which are the natural hosts of the disease, usually drink date juice at night. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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